1. Description

The SP001GBLDU333O02 is a 64M x 8bits Double Data Rate SDRAM high-density for DDR1-333.The SP001GBLDU333O02 consists of 16pcs CMOS 64x8 bits Double Data Rate SDRAMs in 66 pin TSOP package, and a 2048 bits serial EEPROM on a 184-pin printed circuit board. The SP001GBLDU333O02 is a Dual In-Line Memory Module and is intended for mounting into 184-pin connector sockets. Synchronous design allows precise cycle control with the use of system clock. Data I/O transactions are possible on both edges of DQS. Range of operation frequencies, programmable latencies allow the same device to be useful for a variety of high bandwidth, high performance memory system applications.

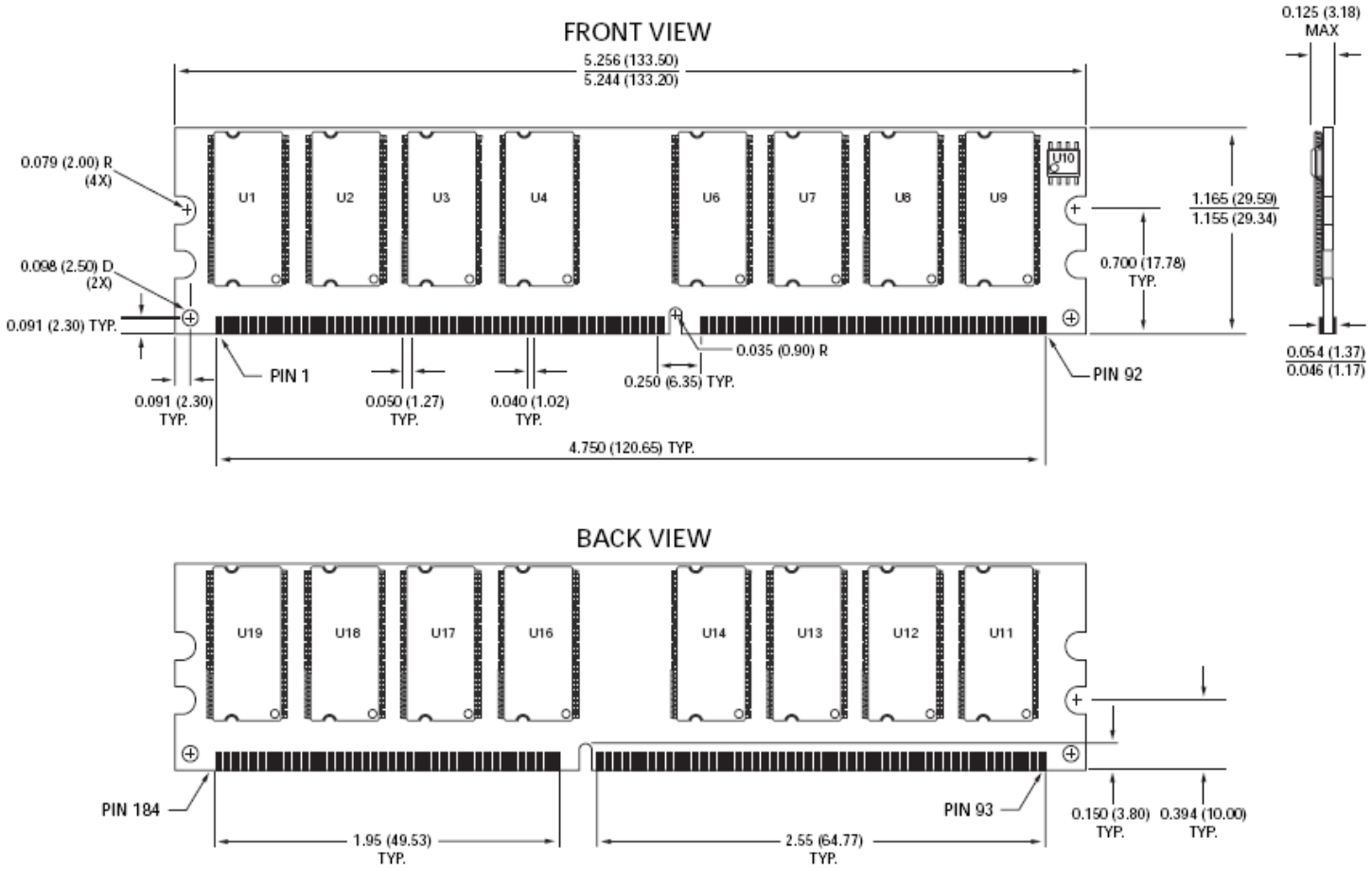
2. Features

- **Double--data--rate architecture; two data transfers per clock cycle**
- **Bidirectional, data strobe (DQS) is transmitted/received with data, to be used in capturing data at the receiver**
- **DQS is edge--aligned with data for READs; center--aligned with data for WRITEs**
- **Differential clock inputs (CK and /CK)**
- **DLL aligns DQ and DQS transitions with CK transitions**
- **Commands entered on each positive CK edge; data and data mask referenced to both edges of DQS**
- **Four internal banks for concurrent operation**
- **Data mask (DM) for write data**
- **Burst lengths: 2, 4, or 8**
- **AUTOPRECHARGE option for each burst access**
- **Auto Refresh and Self Refresh Modes**
- **JEDEC standard 2.5 V (SSTL_2 compatible) I/O**
- **66pin TSOP II Leaded & Pb-Free (RoHS compliant) package**

3. Module Specification

Item	Specification
Capacity	1024MByte
Physical Bank(s)	2
Module Organization	128M x 64bit
Module Type	Unbuffered NonECC
Speed Grade	PC 2700/CL=2.5,tRCD=3,tRP=3 (DDR333)
Voltage Interface	SSTL_2
Power Supply Voltage	2.5V±0.1V
Burst Lengths	2,4,8
DRAM Organization	64M x 8bit DDR SDRAM
PCB Layer	6Layers
Contact Tab	184pin GOLD Flash Plating
Serial PD	Support

4. Simplified Mechanical Drawing with Keying Positions



Notes **：** 1. All dimensions are in millimeters (inches); MAX/MIN or typical (TYP) where noted.